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Yong Cheol Park

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BIRCH STEWART KOLASCH & BIRCH

PO BOX 747

FALLS CHURCH, VA 22040-0747

EXAMINER

PATEL, GAUTAM

ART UNIT

PAPER NUMBER

2656

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/774,437

Applicant(s)

PARK, YONG CHEOL

Examiner

Gautam R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to amendment filed on 1/20/06.
2. claims 1-40 remain for examination.
3. Double Patenting of claims 1-14 is withdrawn in light of the Terminal Disclaimer which was filed and was approved.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 14-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kulakowski et al., US. patent 5,303,219 (hereafter Kulakowski).

As to claim 1, Kulakowski discloses the invention as claimed, a method for formatting an optical recording medium [see Figs. 1-9, especially 8-9] including resetting the location information and formatting the optical recording medium, comprising the steps of:

- (a) resetting the location information of the spare area in response to a formatting request to indicate at least that there is no spare area assigned; and
- (b) formatting the optical recording medium in response to the formatting request at least to use the spare area as a user data area after formatting [ABSTRACT; col. 7, line 40 to col. 8, line 26].

5. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Kulakowski:

determining if a spare area has been assigned prior to said resetting step (a) and said formatting step (b), wherein said steps (a) and (b) are performed if a spare area has been assigned [ABSTRACT; col. 7, line 40 to col. 8, line 26].

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6. The aforementioned claim 3, recites the following steps, inter alia, disclosed in Kulakowski:
said resetting step (a) comprises converting the location information of the spare area to a predetermined value [col. 8, lines 27-56].

7. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Kulakowski:
the predetermined value is a lowest possible address value [col. 8, lines 27-56].

8. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Kulakowski:
the predetermined value is a highest possible address value [col. 8, lines 27-56].
NOTE: When addresses are selected inherently they cover start address and end address, which are by definition highest and lowest.

9. The aforementioned claim 6, recites the following steps, inter alia, disclosed in Kulakowski:
the predetermined value is a specific preset code [col. 8, lines 27-56].

As to claim 14, it is rejected for similar reasons set forth in the rejection of claim 1, supra.

10. As to claims 15-17, they are rejected for similar reasons set forth in the rejection of claims 2-4 respectively, supra.

Claim Rejections - 35 U.S.C. § 103

11. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-13 and 18-40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kulakowski as applied to claims 1-6 and 14-17 above in view of AAPA [Applicants Admitted Prior Art].

As to claim 7, Kulakowski discloses all of the above elements, including using spare area as user area, formatting command and SDL and PDL. Kulakowski does not specifically disclose details of the SDL and PDL, certification and to the extent claimed.

However, Kulakowski clearly discloses that the PDL and SDL are being used. Also AAPA discloses:

said formatting step (b) includes registering sectors judged to have defects into a new PDL (primary defect list), if the optical recording medium is to be formatted with certification [paragraph 15-16].

Both Kulakowski, and AAPA are interested in providing disc structure arrangement with help of PDL and SDL.

Therefore, it would have been obvious to provide the system of Kulakowski with certification and associated details as taught by AAPA. The application or use of the certification and associated details as taught by AAPA would have been obvious, because these details performs the same function in the same way as the PDL and SDL of the of Kulakowski's system, and is an equivalent element. One of ordinary skill in the art would have recognized that the certification and associated details of PDL and SDL of AAPA was equivalent and an obvious alternative to PDL and SDL of system of Kulakowski.

12. The aforementioned claim 8, recites the following steps, inter alia, disclosed in AAPA: formatting step (b) includes registering all sectors previously judged in an old SDL (secondary defect list) into a new PDL (primary defect list) if the optical recording medium is to be formatted without certification [paragraph 17].

The aforementioned claim 9, recites the following steps, inter alia, disclosed in AAPA: the location information of the spare area is stored in a secondary defect list of the defect management area of the optical recording medium [paragraph 14].

13. The aforementioned claim 10, recites the following steps, inter alia, disclosed in AAPA: the location information of the spare area includes start and end addresses of the spare area on the optical recording medium [fig. 4A and paragraph 12-13].

14. The aforementioned claim 11, recites the following steps, inter alia, disclosed in AAPA: formatting step (b) further includes disposing of an old SDL (secondary defect list) existing prior to said formatting step (b), if the optical recording medium is to be formatted with certification [paragraph 16].

15. The aforementioned claim 12, recites the following steps, inter alia, disclosed in AAPA: said formatting step (b) reformats the optical recording medium by moving defective sectors registered in a first list to a second list [paragraph 16-17].

16. The aforementioned claim 13, recites the following steps, inter alia, disclosed in Kulakowski:

the first list and second list are, respectively, an SDL (secondary defect list) and a PDL (primary defect list) for the optical recording medium [paragraph 6].

17. As to claims 18-19, they are rejected for similar reasons set forth in the rejection of claims 7-8 respectively, supra.

18. As to claims 20-21, they are rejected for similar reasons set forth in the rejection of claims 11-12 respectively, supra.

19. The aforementioned claim 22, recites the following steps, inter alia, disclosed in AAPA: the spare area includes a primary spare area and a supplementary spare area, and the second information indicates the size of the supplementary spare area [paragraph 12-13].

20. The aforementioned claim 23, recites the following steps, inter alia, disclosed in AAPA:

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the second information includes start and end addresses of the supplementary spare area [paragraph 12-13].

21. The aforementioned claim 24, recites the following steps, inter alia, disclosed in AAPA: the start address of the supplementary spare area is reset to a predetermined value when said formatting step (b) occurs [paragraph 12-13].

22. The aforementioned claim 25, recites the following steps, inter alia, disclosed in Kulakowski:

(a) receiving a formatting request to format the optical recording medium; and (b) formatting the optical recording medium in response to the formatting request which allows use of the supplementary spare area as a user data area after formatting [ABSTRACT; col. 7, line 40 to col. 8, line 26].

As to rest of claim AAPA discloses:

wherein if the supplementary spare area was assigned before said formatting step (b), the method further comprising registering position information of a defective area included in the supplementary spare area into the first information of the defect management information, and resetting the second information indicating the size of the supplementary spare area, including indicating that there is no supplementary spare area assigned [paragraph 121-3].

23. The aforementioned claim 26, recites the following steps, inter alia, disclosed in AAPA: said step (b) is performed only when the supplementary spare area has been assigned [paragraph 12-13].

24. The aforementioned claim 27, recites the following steps, inter alia, disclosed in AAPA: the first information includes a PDL (primary defect list) and a SDL (secondary defect list) [paragraph 6].

25. The aforementioned claim 28, recites the following steps, inter alia, disclosed in AAPA:

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the supplementary spare area is extended from a fixed location close to a lead-out area to a variable inner location of the optical recording medium [paragraph 6-7].

26. As to claims 29-30, they are rejected for similar reasons set forth in the rejection of claims 23-24 respectively, supra.

27. As to claim 31, AAPA teaches start address and end address and that the start address and that the second information area is reset to a preset code. Kulakowski does not teach that preset code is value 00h or FFh.

“Official Notice” is taken that both the concept and the advantages of providing 00h or FFh as preset code are well known and expected in the art. It is well known in the art these codes refers to beginning and end codes for the memory locations. It would have been obvious to include 00h or FFh as preset codes to AAPA as these numbers easy to track and are usually used for start or end addresses within memory arrangement, and thereby saving time in accessing the memory location. These concepts are well known in the art and do not constitute a patentably distinct limitation, per se [M.P.E.P. 2144.03].

28. The aforementioned claim 32, recites the following steps, inter alia, disclosed in AAPA: a spare area for replacing a defective area found during a formatting of the recording medium or at least after formatting, with an available replacement area; and a defect management area including defect management information for managing a defective area, the defect management information including first information to indicate a defective unit found, and second information to indicate a size of the spare area [paragraph 5, 7, 11]

As to rest of the claim Kulakowski discloses:

wherein the spare area is changed to a usable user area when formatting, while the second information is reset to indicate that there is no longer a spare area assigned [ABSTRACT; col. 7, line 40 to col. 8, line 26].

29. The aforementioned claim 33, recites the following steps, inter alia, disclosed in AAPA: the recording medium is a DVD-RAM [paragraph 3].

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30. As to claims 34-40, they are claims corresponding to claims 27, 8, 22, 28, 23 24 and 31 respectively, and are therefore rejected for similar reasons set forth in the rejection of claims 27, 8, 22, 28, 23 24 and 31 respectively, supra.

31. Applicant's arguments filed on 1/20/06 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "Kulakowski discloses that the user is warned when a predetermined threshold percentage amount of the spare area rare consumed due to the defects.

Figure 9D of Kulakowski describes the formatting process in which the defective areas are reclaimed as being usable... There is no description whatsoever regarding whether it is possible to indicate that no spare area is assigned." [page 15-16 last and first paragraph].

FIRST: careful examination of col. 8, lines 20-31 shows that Kulakowski clearly discloses that "If no sectors were identified, the process ends, otherwise branch is made to fig. 9D to reclaim the identified reusable sectors according to the chosen option. In other words if no spare sectors or area is found system return to reformatting.

SECOND: Also Kulakowski clearly discloses that when "no spare are is left" that is all of 70% of spare area has been used and error message is generated indicating that no spares are left and disk is reformatted [col. 5, lines 20-41].

THIRD: Claims 1, 11, 18 2137, 40 and 44 in are specifically pointing to this concept. So indeed Kulakowski is disclosing a step of finding if spare area is assigned or not but also how many sectors of that spare are assigned.

FOURTH: Also, for the sake of argument, even if Kulakowski does not show this concept [which he clearly does]; one of ordinary skill in the art at the time of invention would have known that by keeping spare are 'lack information' flexible defect management can be achieved and sectors can be borrowed from each of different areas. These concepts are well known in the art for a while and does not constitute patentable distinction per se.

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B) That: "First, Applicant does not admit that the related art described in the present application is prior art". [page 17, paragraph 2; REMARKS].

FIRST: This is kind of argument is surprising to the Examiner, since these concepts are well known and some them are shown by the "other art" that was already sent by the Examiner.

SECOND: The Applicants has not shown that this information was only known to the inventor prior to filing of this application. No proof has been provided. therefore this art will be treated as prior art.

C) That; "Independent claim 25 recites, in part "resetting ... independent claim 32 recites ..." [page 17, paragraph 5-6; REMARKS].

See arguments presented above in paragraph 31 section A) above.

OTHER ART

32. Ito et al. US patent 5,715,221 "Method for ...".

33. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact information


34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



GAUTAM R. PATEL
PRIMARY EXAMINER

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

February 28, 2006